



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|------------------|
| 10/622,091 | 07/17/2003 | Roberto Conti | 60,130-1847; 02MRA0353 | 1079 |
| 26096 | 7590 | 03/11/2005 | EXAMINER | |
| CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009 | | | RODRIGUEZ, PAMELA | |
| | | ART UNIT | | PAPER NUMBER |
| | | | | 3683 |

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|---|---------------------------|------------------|
| <i>SJ</i> Office Action Summary | Application No. | Applicant(s) |
| | 10/622,091 | CONTI |
| | Examiner Pam Rodriguez | Art Unit 3683 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statuté, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 January 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 16-18 is/are allowed.
 6) Claim(s) 1-14 is/are rejected.
 7) Claim(s) 15 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. The Amendment filed January 17, 2005 has been received and considered.

Note, upon applicant's request, the examiner has attempted to retrieve a translated copy of the Sakamoto et al reference relied upon in the rejections below and will submit this to applicant upon his next communication with the office.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 and 8-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 57208331 to Sakamoto et al.

Regarding Claim 1, Sakamoto et al disclose a brake rotor (see Figure 1) having all the features of the instant invention including: an annular disc 1 having first and second brake portions 3 (see Figure 2), wherein the first brake portion (see Figure 2 and the left element 3) is connected to an annular mounting flange (see Figure 1 and the mounting flange in which the mounting holes are housed therein), a radially inner flange wall (see Figure 1 and the portions of the flange located directly below the mounting holes in between the grooves of the mounting flange), wherein the inner flange wall has a plurality of circumferentially spaced mounting holes (see Figure 1 and

Art Unit: 3683 .

the mounting holes shown therein), a plurality of recesses in the inner flange wall (see the scalloped recess portions located below the mounting holes), each recess being disposed circumferentially between adjacent mounting holes (see Figure 1), and a plurality of ventilation vanes 2 positioned between the first and second braking portions of the annular disc 1 (see Figure 2), wherein at least one of the vanes (see the right portion of vane 2 in Figure 2) includes an inner vane portion extending inwardly of a radially inner edge of the second brake portion (see Figure 2 and at least the thickness of the right portion of vane 2, which extends inwardly ,i.e., to the left of, right braking portion 3).

Regarding Claim 2, see Figure 1.

Regarding Claim 3, see Figure 1.

Regarding Claim 4, see Figure 1 and note the circle that would be formed at the lowermost portions of the vanes 2.

Regarding Claim 5, see Figure 1 and note at least one of the outer side portions of the recesses and how a circle formed through these portions would be of a lesser diameter than a circle diameter drawn through the lowermost edges of vanes 2.

Regarding Claim 6, see Figure 1 and note how a circle diameter drawn through a center of each of the mounting holes would be “substantially the same” as the diameter of the circle defined by the inner edges of the inner vane portions.

Regarding Claim 8, see Figure 1.

Regarding Claim 9, see Figure 1.

Regarding Claim 10, see claim 5 above.

Regarding Claim 11, if an axis is drawn through the top uppermost portion of the mounting flange and an axis is drawn through the center of the disc then the two parts can be said to be "axially offset".

Regarding Claim 12, since the disc 1 and the mounting flange contact one another, these two parts can be said to be "axially overlapping".

Regarding Claim 13, see Figure 2.

Regarding Claim 14, see Figure 2.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent no. 57208331 to Sakamoto et al in view of Japanese Patent no. 2000240695 to Miyagawa et al.

Regarding Claim 7, Sakamoto et al disclose most all the features of the instant invention as applied above, except for the mounting holes having radially inner edges defining a mounting hole inner edge circle which has a diameter that is less than the diameter of the circle defined by the radially inner edges of the inner vane portions.

Miyagawa et al are relied upon merely for their teachings of a brake rotor (see Figure 2) having mounting holes with radially inner edges (see Figure 2 and the

lowermost edges of the mounting holes' inner diameters) which can define a mounting hole inner edge circle which has a diameter that is less than the diameter of a circle drawn through the radially inner edges of the vanes 6.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the brake rotor of Sakamoto et al so that the mounting holes have radially inner edges defining a mounting hole inner edge circle which has a diameter that is less than the diameter of the circle defined by the radially inner edges of the inner vane portions as taught by Miyagawa et al as a matter of design preference dependent upon the desired position of the mounting holes relative to the vane portions to achieve the greatest strength properties between these two parts.

Allowable Subject Matter

6. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. Claims 16-18 are allowed.

Response to Arguments

8. Applicant's arguments filed January 17, 2005 have been fully considered but they are not persuasive.

Applicant's main point of contention is that the ventilation vanes of the Sakamoto et al reference, while positioned between the first and second brake portions, do not

Art Unit: 3683

have an inner vane portion extending inwardly of a radial inner edge of the second brake portion.

In response to this, while the examiner understands applicant is referring to his vane 18B and how it includes an inner vane portion 32 which extends inwardly of a radially inner edge of second brake portion 16 (delineated in applicant's Figure 3 by the lead line extending out to arrow G), applicant's remarks are more specific than the claim language. Sakamoto discloses in Figure 2 first and second brake portions 3 with ventilation vanes 2 disposed therebetween. So if the inner vane portion is taken to be the thickness of the right portion of vane 2 shown in Figure 2, second brake portion is taken to be right element 3, and the radial inner edge of the second brake portion is taken to be the face of element 3 contacting vane 2, then one can conclude that this claim limitation is met.

A more specific claiming, like that stated in Claim 16, of the second brake portion having a second radial inner wall positioned further away from the axis of rotation than the first radial inner wall of the annular mounting flange, would overcome this rejection.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 3683

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pam Rodriguez whose telephone number is 703-308-3657. The examiner can normally be reached on Mondays 5 am -3:30 pm and Tuesdays 5 am -11 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pam Rodriguez
Primary Examiner
Art Unit 3683



Pr

02/08/05